

IN THE CLAIMS:

Please cancel claims 1-42, without prejudice or disclaimer.

Please add the following new claims:

43. A purified polypeptide comprising an amino acid sequence selected from the group consisting of:

- a) an amino acid sequence of SEQ ID NO:1 or SEQ ID NO:3,
- b) a naturally-occurring amino acid sequence having at least 90% sequence identity to the sequence of SEQ ID NO:1 or SEQ ID NO:3,
- c) a biologically-active fragment of the amino acid sequence of SEQ ID NO:1 or SEQ ID NO:3, and
- d) an immunogenic fragment of the amino acid sequence of SEQ ID NO:1 or SEQ ID NO:3.

44. An isolated polypeptide of claim 43, having a sequence of SEQ ID NO:1 or SEQ ID NO:3.

45. An isolated polynucleotide encoding a polypeptide of claim 43, or a polynucleotide complementary thereto.

46. An isolated polynucleotide of claim 45, having a sequence of SEQ ID NO:2 or SEQ ID NO:4.

47. A recombinant polynucleotide comprising a promoter sequence operably linked to a polynucleotide of claim 45.

48. A cell transformed with a recombinant polynucleotide of claim 47.

49. A method for producing a polypeptide of claim 43, the method comprising:

- a) culturing a cell under conditions suitable for expression of the polypeptide, wherein said cell is transformed with a recombinant polynucleotide, and said recombinant polynucleotide

comprises a promoter sequence operably linked to a polynucleotide encoding the polypeptide of claim 43, and

b) recovering the polypeptide so expressed.

50. A transgenic organism comprising a polynucleotide of claim 47.

51. An isolated antibody which specifically binds to a polypeptide of claim 43.

52. An isolated polynucleotide comprising a sequence selected from the group consisting of:

- a) a polynucleotide sequence of SEQ ID NO:2 or SEQ ID NO:4,
- b) a naturally-occurring polynucleotide sequence having at least 90% sequence identity to the sequence of SEQ ID NO:2 or SEQ ID NO:4,
- c) a polynucleotide sequence complementary to a), and
- d) a polynucleotide sequence complementary to b).

53. An isolated polynucleotide comprising at least 60 contiguous nucleic acids of a polynucleotide sequence of claim 52.

54. A method for detecting a target polynucleotide in a sample, said target polynucleotide having a sequence of a polynucleotide of claim 52, the method comprising:

a) hybridizing the sample with a probe comprising at least 16 contiguous nucleotides comprising a sequence complementary to said target polynucleotide in the sample, and which probe specifically hybridizes to said target polynucleotide, under conditions whereby a hybridization complex is formed between said probe and said target polynucleotide, and

b) detecting the presence or absence of said hybridization complex, and, optionally, if present, the amount thereof.

55. A method of claim 54, wherein the probe comprises at least 30 contiguous nucleotides.

56. A method of claim 54, wherein the probe comprises at least 60 contiguous nucleotides.

Sub 3
57. A pharmaceutical composition comprising an effective amount of a polypeptide of claim 43 and a pharmaceutically acceptable excipient.

58. A method for screening a compound for effectiveness as an agonist of a polypeptide of claim 43, the method comprising:

- a) exposing a sample comprising a polypeptide of claim 43 to a compound, and
- b) detecting agonist activity in the sample.

59. A pharmaceutical composition comprising an agonist compound identified by a method of claim 58 and a pharmaceutically acceptable excipient.

60. A method for screening a compound for effectiveness as an antagonist of a polypeptide of claim 43, the method comprising:

- a) exposing a sample comprising a polypeptide of claim 43 to a compound, and
- b) detecting antagonist activity in the sample.

B1 Cont.
61. A pharmaceutical composition comprising an antagonist compound identified by a method of claim 60 and a pharmaceutically acceptable excipient.

62. A method of treating cancer, comprising administering to a patient in need of such treatment the pharmaceutical composition of claim 61.